

INSTITUTION: COLORADO SCHOOL OF MINES

This analysis paraphrases or provides excerpts from an institution's role and mission document on market niche; role and mission; and strengths, weaknesses and opportunities. Page references to the final role and mission document are included. Each analysis section is followed by standard questions prepared by CCHE staff as a context for the Blue Ribbon Role and Mission discussion.

Note: The role and mission of CSM is central to the development of a performance-based contract as an exemplary institution under recent legislation (SB 01-229).

MARKET NICHE (pp. 1; 11)

The concept of a Connected Learning Community has been proposed as a unifying theme. CSM has identified some assumptions for the future development and direction for the Colorado School of Mines.

- *The campus will remain about the same size; centered around a traditional residential campus and driven by quality and the goal of success for every student, faculty member and staff member.*
- *The Colorado School of Mines will maintain uniqueness in programmatic focus and connectedness while evolving to meet changing societal needs. **The academic enterprise will maintain the characteristics and hallmarks of the Mines culture.***
- *Resource opportunities will be realized through the "Transforming Resources" campaign and the "Exemplary Institution Bill".*
- *The strategic plan will aim for long-term sustainable pre-eminence in six intended mission-driven areas including*
 - 1) *engineering education,*
 - 2) *earth science and engineering,*
 - 3) *energy,*
 - 4) *materials,*
 - 5) *environment, and*
 - 6) *computational science.*

In the Carnegie Classification of Higher Education Institutions, 2000 Edition, the Colorado School of Mines is listed as a Specialized Institution – Schools of Engineering and Technology. This category was clearly the best fit for CSM reflecting the school's focused mission in engineering and applied science.

Colorado residents are the primary student market for CSM making up 76% of CSM's undergraduate students. The school's secondary market, out-of-state students, comprises about 24% of total undergraduate enrollment. International students make up CSM's third definable student market.

Is it unique? Yes

Has it changed? No

How will it provide increased access to Colorado residents or the market that is tied to this institution's role and mission?

The document contains general statements about access, although one assumption refers to "evolving to meet changing societal needs."

ROLE & MISSION

Current Statutory R&M

23-40-105 The School of Mines shall be a specialized baccalaureate and graduate research institution with high admission standards. The Colorado School of Mines shall have a unique mission in energy, mineral and material science and engineering and associated engineering and science fields. The school shall be the primary institution offering energy, mineral, and material science and mineral engineering degrees at both the graduate and undergraduate levels.

Is the proposed change consistent with the statutory role and mission?

NA

What parts of the proposed role and mission statement differentiate this institution from other Colorado public institutions of higher education?

The current statutory language describes a unique market niche for this institution. Its unique role implies that it is the sole institution providing access to degrees in this area.

Does the institution suggest a statutory change?

No

What other R&M statements are contained in the proposal but not captured in the role and mission statement?

Add computational sciences to list of programs. As a related field it is consistent with the current statutory role and mission, but not as an exclusive field of study.

STRENGTHS (pp 1-2)

- *mission-driven focus in programmatic offerings and research,*
- *expertise and dedication of its faculty (.” Ninety-nine percent of CSM’s regular faculty hold the doctoral degree in mission-related fields, and new faculty are recruited from an international pool)*
- *quality of its student body*
- *professional success of our graduates.*
- *At the graduate level, and against a backdrop of nationally declining graduate enrollments in science and engineering, the CSM programs that attract the most graduate students are in geology and geological engineering. The primary reason for this is CSM’s world-renowned reputation in this field.*
- *CSM’s ethos for practical relevance, industry connectivity, and hard work*
- *community of scholars on a residential campus*

WEAKNESSES (p. 2)

*The most persistent weaknesses at the Colorado School of Mines derive from its limitations to support **the high costs of a technologically advanced** enterprise. While the provision and support of an advanced technological infrastructure is not only an imperative element of our operation, it is increasingly a recurring, and **large, operating expense** that is not adequately addressed **capital expenditure**.*

MARKET OPPORTUNITIES (p. 3)

The interplay among technical, societal, economic and policy interests as they relate to energy, materials, minerals and the environment has become critical in the arena of modern development and consumption against a worldwide backdrop of an expanding, yet stratified, population.

*Our greatest opportunity, therefore, is to **elevate the eminence** and impact of what we are doing, bringing greater reputation to the institution and to the state of Colorado from an international audience and marketplace.*

ADMISSION STANDARDS

Among four-year public institutions in Colorado, Mines is a [highly] selective institution, requiring an index score of 110. Up to 20% of admitted freshmen may have a score of less than 110. The current

Colorado School of Mines
Role and Mission Discussion: November 8, 2001
Prepared: 11/5/2001

admissions policy and standards work well for the Colorado School of Mines. The school is not seeking a change at this time.

What number of freshmen applicants meets the current admission index?

In 2000-01, 1,371 applicants met CSM's index of 110.

If the window was decreased to 10% or less, how would this impact freshmen enrollment?

CSM uses a 13% window. If state policy allowed a 10% window, CSM would lose 10 students. At 10%, CSM could admit applicants that have an index of 100 or above and meet CSM's more specific admission criteria.